A2 cont. structure 14 (formed by phase shifter 26 and optical couplers 24 and 25). As a result, these portions of the optical signal can accumulate the phase shifts introduced by phase shifter 26 before exiting partially reflective facet 22.

IN THE CLAIMS

Please amend claims 1, 6, 10, 15, 19, 22 and 27 as follows.

1. (Amended) An optical switching device, comprising:

an optical cavity having an input port and an output port; and

a phase modulator disposed within the optical cavity, the phase modulator, comprising:

A3 a phase modulator input port and a phase modulator output port respectively coupled to the input port and the output port of the optical cavity;

a first optical combiner coupled to the phase modulator input port; and

a second optical combiner coupled to the phase modulator output port,

wherein the phase modulator ~~to introduce~~ introduces a phase shift in a portion of an optical signal propagating in the optical cavity in one direction, and ~~to introduce~~ introduces a phase shift in another portion of the optical signal propagating in another direction.

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6. (Amended) The optical switching device of claim 2 wherein the first and second optical combiners are each a Y-coupler.

10. (Amended) An optical switching device, comprising:

an optical cavity having an input port and an output port; and

A5

means, disposed within the optical cavity, for modulating a phase of a portion of an optical signal propagating in the optical cavity, the means for modulating including a first optical combiner, disposed within the optical cavity, coupled to the input port and a second optical combiner, disposed within the optical cavity, coupled to the output port.

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15. (Amended) The optical switching device of claim 11 wherein the first and second optical combiners are each a Y-coupler.

19. (Amended) A planar integrated optical circuit, comprising:

a first facet having a reflectance less than one;

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a second facet having a reflectance less than one;

a first optical combiner coupled to the first facet;

a second optical combiner coupled to the second facet;

a first arm having one end coupled to the first optical combiner and another end coupled to the second optical combiner;

a second arm having one end coupled to the first optical combiner and another end coupled to the second optical combiner; and

a phase shifter operatively coupled to the first and second arms.

22. (Amended) A method, comprising:

propagating an optical signal into an optical cavity through a first input port disposed within the optical cavity;

causing a portion of the optical signal to propagate in one optical path and another portion of the optical signal to propagate in another optical path using a first optical combiner coupled to the first input port;

selectively introducing a phase difference between the portions of the optical signal within the optical cavity;

combining the portions of the optical signal using a second optical combiner; and

propagating a portion of the combined signal out of the optical cavity through an output port coupled to the second optical combiner.

27. (Amended) An optical switching device, comprising:

an optical cavity;

means for propagating an optical signal into the optical cavity;

a first optical combiner, wherein the first optical combiner causes ~~to cause~~ a portion of the optical signal to propagate in one optical path and another portion

of the optical signal to propagate in another optical path, coupled to the means for propagating an optical signal into the optical cavity;

means for selectively introducing a phase difference between the portions of the optical signal disposed within the optical cavity;

a second optical combiner to combine the portions of the optical signal; and

means for propagating a portion of the combined signal out of the optical cavity coupled to the second optical combiner.